## IN THE SPECIFICATION



Please amend the specification as follows:

At page 1, line 13, directly following "incorporates", please delete "each of".

At page 1, line 14, please delete "Applications" and insert in its place -- Application --.

At page 1, line 14, please delete "\_\_\_\_\_" and insert in its place - - 08/911,312 - -.

At page 1, line 14, please delete "(Attorney Docket No. 015389-002500)".

At page 4, line 19, please delete "other" and insert in its place - - another - -.

At page 4, line 25, please delete "other" and insert in its place - - another - -.

At page 5, line 10, please delete duplicate word "detecting".

At page 6, line 6, between "amount," and "human", please insert - - of - -.

At page 7, line 29, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 8, line 4, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 8, line 26, please delete "Bm\_R1, reverse transcriptase from *Bombyx mori* R1 non-LTR retrotransposable element;".

At page 9, line 9, delete "a hTRT" and insert in its place - - -an hTRT - -.

At page 9, line 15, delete "pr" and insert in its place - - protein. - -.

At page 9, line 18, delete "(SEQ ID NO. 7)" and insert in its place -- (SEQ ID NO: 7) --.

At page 9, line 25, delete "(Seq. ID. NO: 1)" and insert in its place -- (SEQ ID NO: 1) --.

At page 9, line 26, delete "(SEQ ID NO. 2)" and insert in its place -- (SEQ ID NO: 2) --.

At page 9, lines 26 and 27, please delete "SEQ. ID NO. 1" and insert in its place -- SEQ ID NO: 1 --.

At page 9, line 28, please delete "(SEQ ID NO. 3)" and insert in its place -- (SEQ ID NO: 3) --.

At page 9, line 28, please delete "(SEQ ID NO. 10)" and insert in its place -- (SEQ ID NO: 10) --.

At page 9, line 28, please delete "SEQ ID NO. 3" and insert in its place -- SEQ ID NO: 3 --.

At page 10, line 2, between "(" and "SEQ" please delete the extra space.

At page 10, line 4, please delete "NO. 6" and insert in its place -- NO: 6 --.

At page 10, line 6, please delete "(SEQ ID NO. 8)" and insert in its place -- (SEQ ID NO: 8) --.

At page 10, line 7, please delete "(SEQ ID NO. 9)" and insert in its place -- (SEQ ID NO: 9) --.

At page 10, line 8, before "deleted" please delete the tab.

At page 11, line 18, between "products" and "are", please delete "and".

At page 12, line 21, between "S." and "pombe", please insert a space.

At page 15, line 6, delete "thos" and insert in its place - - those - -.

At page 15, line 24, delete the comma and insert it at the end of the parenthetical, directly preceding "it".

At page 16, line 11, insert a comma between "acid" and "a".

At page 17, line 8, insert a comma between "reagents" and "and the".

At page 17, line 28 please delete the unclosed parenthetical mark, which directly follows "nucleotides".

At page 19, line 18, directly after "Example 11" please insert - -, can be used - -.

At page 19, line 23, between "acids)" and "can", please insert a comma.

At page 20, line 13, delete "nonvertebrate" and insert in its place -- nonvertebrates --.

At page 21, line 7, please delete "AF15950" and replace with -- AF015950--.

At page 21, line 18, after "Figure 20" please delete "\*".

At page 25, line 11, between "acids" and "are" please insert a comma.

At page 26, line 18, delete "system." and insert in its place -/ systems. - -."

At page 26, line 27, delete "de novo" and insert in its place - - de novo - -.

At page 27, line 2, between "detail" and "infra" please delete "in".

At page 27, line 3, delete "an other" and insert in its place - - another - -.

At page 27, line 6, please delete the unclosed parenthetical mark, which directly follows "like".

At page 28, line 19, delete "oligonucleotide" and insert in its place -- oligonucleotides --.

At page 29, line 25, delete "provides" and insert in its place - provide - -.

At page 31, line 9, put a period at the end of the sentence.

At page 31, line 22, between "reaction" and "or" please delete "(PCR)".

At page 32, line 2, delete "as" and insert in its place -- are --.

At page 38, line 6, delete "reponse," and insert in its place - response, - -.

At page 38, line 7, at the end of the line, directly after "and" please insert - - for - -.

At page 38, line 30, delete the first instance of "[Figure 19]" and insert in its place
-- [Figure 20] --

At page 39, line 3, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 40, line 13, at the end of the line, directly after "that" insert - - the - -.

At page 40, line 26, delete "acid" and insert in its place - - adds - -.

At page 40, line 28, between "is" and "not" please insert - - typically - -.

At page 41, line 5; delete "a hTRT" and insert in its place - - an hTRT - -.

At page 41, line 8, insert a space between "dATP," and "TTP".

At page 41, line 20, delete "in Table 3" and insert in its place - - below - -.

At page 41, line 24, please delete "TABLE 3".

At page 43, line 19, delete "seperated" and insert in its place - - separated - -.

At page 43, line 23, delete "techniques" and insert in its place - - technique - -.

At page 43, line 29, delete "a" and insert in its place - - an - -.

At page 45, line 10, between "nucleic" and "or" please insert - - acid - -.

At page 45, line 15, delete "a hTRT" and insert in its place - - an hTRT- - .

At page 45, line 26, delete "sections:" and insert in its place - - sections. - -.

At page 46, line 4, delete "example" and insert in its place - - example, by - -.

At page 46, line 14, delete "non-telomenic" and insert in its place -- non-telomeric --.

At page 46, line 16, between "when" and "annealed", please insert - - the primer is - -.

At page 46, line 24, delete "nudeotides" and insert in its place - - nucleotides - -.

At page 46, line 25, delete "," and insert in its place - - ; - -.

At page 46, line 30, delete ";" and insert in its place - - : - -.

At page 47, line 21, delete "al," and insert in its place - - al., - -.

At page 47, line 23, delete "indicates" and insert in its place - - indicate - -.

At page 47, line 24, delete "possesses" and insert in its place - - possess - -.

At page 47, line 26, delete "combinantions" and insert in its place - - combinations - -.

At page 47, line 28, delete "," and insert in its place - - ; - -.

At page 49, line 2, between "RNAs" and "demonstrated" please delete "sequences".

At page 49, line 12, delete "loss-of activity" and insert in its place -- loss-of-activity --.

At page 49, line 26, delete "is" and insert in its place - - are - -.

At page 50, line 3, delete "Roberge, et al.," and insert in its place -- Roberge et al., --.

At page 51, line 16, delete "constructs" and insert in its place - - proteins - -.

At page 51, line 17, delete "protein systems" and insert in its place - - proteins - -.

At page 51, line 30, between "leader" and "sequence", please insert - (fused protein) - -.

At page 52, line 12, between "pecessarily" and "to" please delete "deserving".

At page 53, line 5, between "elements," and "vectors" please insert - - and - -.

At page 53, line 6, at the beginning of the line, please delete "and expression".

At page 54, line 19, delete "Coli" and insert in its place - - coli - -.

At page 54, line 19, between "and" and "E. coli", please delete "the" and insert in its place - - the - -.

At page 54, line 23, delete "dictyostelium" and insert in its place - Dictyostelium - -.

At page 57, line 1, between "CCL51);" and "TR1", please delete "and,".

At page 57, line 1, delete "(1982)" and insert in its place - - (1982)) - -.

At page 57, line 1, at the end of the line after "(1982));", please insert - - and - -.

At page 57, line 3, delete "MD))" and insert in its place - - MD) - -.

At page 57, line 2, delete "WI-38" and insert in its place - - and WI-38 cells - -.

At page 57, line 9, delete "15:345)," and insert in its place - - 15:345);- - .

At page 57, line 25, delete "for example" and insert in its place -- for example, as --.

At page 59, line 28, delete "provide to" and insert in its place - - to provide - -.

At page 59, line 29, delete "described (Gossen" and insert in its place - described elsewhere (see Gossen - .

At page 60, line 16, between "1131:31," and "and", please insert - -) ---

At page 62, line 25, delete "exhibit" and insert in its place - - exhibits - - .

At page 62, line 27, delete "as a variety" and insert in its place - - by a variety - -.

At page 62, line 28, between "reconstitution," and "co-expression" please delete "and".

At page 63, line 8, between "co-expression" and "a recombinant" please insert -- of --.

At page 64, line 29, delete "340:245." and insert in its place - - 340:245). - -.

At page 65, line 12, between "gene" and "colonies" please insert - - in, - -.

At page 65, line 12, delete "cell" and insert in its place - - cells - -.

At page 65, line 12, at the end of the line, after "contain" insert -- the reporter gene --.

At page 65, line 22, between "heteromultimers)" and "is" please insert - -, - -.

At page 65, line 24, delete "(U.S.A.)" and insert in its place - - U.S.A. - -.

At page 68, line 28, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 69, line 2, delete "fragments" and insert in its place - - fragment - -.

At page 69, line 26, at the end of the line, after "doses than" please insert - - for - -.

At page 72, line 5, delete "108," and insert in its place - - 108, - -.

At page 72, line 5, between "109" and "or" please delete "M-1".

At page 72, line 6, between "Fab" and "F(ab')2" please insert --, --.

At page 72, line 12, delete "ed" and insert in its place - - ed., - -.

At page 72, line 26, between "WO 91/17271" and McCafferty" please insert --; --.

At page 73, line 8, after "N.Y.", please delete "19\_" and insert in its place -- 1994 --.

At page 74, line 6, delete "it" and insert in its place -- they --.

At page 74, line 10, delete/"others/systems" and insert in its place -- other systems --.

At page 75, line 23, delete "componants" and insert in its place - - components - -.

At page 76, line 14, delete "\_\_(Attorney docket no. 015389-002500" and insert in its place - - 08/911,312 - -.

At page 78, line 27, delete "immortalied" and insert in its place - - immortalized - -.

At page 78, line 29, between "or" and "activity" please insert - - telomerase - -.

At page 79, line 19, after "which" please delete "hTRT may be under-expressed".

At page 79, line 19, after "which" please insert - - telomere length may be reduced - -.

At page 79, line 29, delete "metabloic" and insert in its place - - metabolic - -.

At page 80, line 5, after "lengthen", please delete "telomerase" and insert in its place -- telomeres - -.

At page 80, line 9, delete "USSN \_\_\_\_\_" and insert in its place -- USSN 08/874,695 --.

At page 81, lines 8-9, delete "applicants do not intend to be" and insert in its place
- - this invention is not - -.

At page 81, line 20, between "methods" and "or" please insert - - of the invention - -.

At page 81, line 28, after the first instance of "repeats" insert - - are formed - -.

At page 82, line 4, delete "polypeptide" and insert in its place - - polynucleotide - -.

At page 83, line 24, after "14:897" please delete ")".

At page 84, line 5, delete "so-formed" and insert in its place - - so formed - -.

At page 86, line 5, delete "hybridize" and insert in its place - - hybridizes - -.

At page 87, line 17, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 87, line 23, after "DNA" please delete ",".

At page 87, line 24, after "NY" please delete ")".

At page 88, line 24, after "Futura Publishing Co" insert - - . - -.

At page 89, line 8, between "13:323" and "and" please insert - - ) - -.

At page 91, line 23, delete "moreties" and insert in its place - - moieties or - -.

At page 93, line 15, delete "introducing a" and insert in its place - - introducing an - -.

At page 93, line 27, delete "gem" and insert in its place - - germ - -.

At page 96, line 2, between "fillers" and "include" please insert - - and - -.

At page 96, line 2, between "limited to" and "sugars" please insert - -, - -.

At page 98, line 12, delete "antagonists" and insert in its place - - antagonist - -.

At page 100, line 6, after cell lines" insert --, --.

At page 100, line 26, after "DNA" please delete ")".

At page 100, line 27, delete "Using" and insert in its place - - With - -.

At page 106, line 34, after "olfactory" please delete a carriage return.

At page 108, line 34, delete "eukayotic" and insert in its place - - eukaryotic - -.

At page 110, line 11, please delete a space after "cell".

At page 111, line 4, directly following "immortal" insert - - cells - -.

At page 113, line 12, delete "type" and insert in its place - - types - -.

At page 115, line 5, delete "that they are" and insert in its place - - as to be - -.

At page 120, line 6, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 120, line 10, delete "(FACS))" and insert in its place - - (FACS) - -.

At page 120, line 19, delete "white cells)" and insert in its place - - white cells)) - -.

At page 121, line 24, between "or" and "fragments", please delete "a".

At page 122, line 27, delete "RNA" and insert in its place - - mRNA - -.

At page 123, line 10, between "RNA" and "to" please insert - - is - -.

At page 123, line 10, delete "cDNA to be is" and insert in its place -- cDNA is to be --.

At page 123, line 19, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 124, line 22, between "for 45 sec" and "and 72" please insert - -, - -.

At page 124, line 22, between "for 90 sec" and "at 95°" please insert --, followed by an incubation --.

At page 126, line 15, delete "system" and insert in its place - - systems - -.

At page 126, line 18, delete "5395)" and insert in its place - - 5395) - -.

At page 130, line 14, delete "difference in the malor" and insert in its place -- difference in the molar --.

At page 130, line 28, between "or" and "appropriate" please delete "an".

At page 132, line 27, delete "of cDNA" and insert in its place - - or cDNA. - -.

At page 133, line 13, directly following "alleles" please insert - - or - -.

At page 133, line 13, please delete carriage return.

At page 133, line 15, delete "Mutations" and insert in its place, immediately following "alleles", - - mutations - -.

At page 133, line 28, delete "following:" and insert in its place - - following. - -.

At page 133, line 29, delete "employed;" and insert in its place - - employed: - -.

At page 134, line 20, delete "DNAs," and insert in its place - - DNAs: - -.

At page 134, line 22, delete "art," and insert in its place - - art: - -.

At page 134, line 23, between "discussed" and "illustrate" please insert - - below - -.

At page 135, line 14, delete "nature by" and insert in its place - - manner in - -.

At page 135, line 23, between "30:131" and "Gross" please insert - -; and - -.

At page 135, line 29, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 137, line 13, delete "G." and insert in its place - - F) - - (see page 121).

At page 139, line 14, between "e.g.," and "the hTR?" please delete ":".

At page 141, line 3, delete "an TRT/antibody" and insert in its place -- a TRT/antibody --

At page 141, line 14, between "indirect" and "where" please insert - - , - -.

At page 143, line 12, directly following "3059" please delete ")".

At page 143, line 30, delete "H)" and insert in its place -- G) --.

At page 144, line 16, delete "I)" and insert in its place - - H) - -.

At page 145, line 5, delete "J)" and insert in its place - - I) - -.

At page 145, line 9, delete "a hTRT" and insert in its place - - an hTRT - -.

At page 145, line 27, between "of" and "TRT" please delete "a predisposition for".

At page 146, line 7, delete "&" and insert in its place - - and - -.

At page 146, line 9, delete "&" and insert in its place - - and - -.

At page 146, line 11, delete "&" and insert in its place - - and - -.

At page 146, line 12, delete "&" and insert in its place - - and - -.

At page 146, line 13, delete "&" and insert in its place - - and - -.

At page 146, line 14, delete "conditions (&" and insert in its place -- conditions (and --.

At page 146, line 14, delete "identity (&" and insert in its place - - identity (and - -.

At page 146, line 15, delete "&" and insert in its place -- and --.

At page 147, line 23, delete "refers" and insert in its place - - refer - -.

At page 148, line 26, between "refers to" and "oligo-" please delete "an".

At page 148, line 26, delete "comprises" and insert in its place - - comprise - -.

At page 149, line 16, delete "232: 464." and insert in its place - - 232:464). - -.

At page 149, line 26, between "property)" and "indicate" please delete "," and insert in its place - - or - -.

At page 153, line 28, delete "linkages).." and insert in its place - - linkages). - -.

At page 157, line 19, delete "used/for sense suppression".

At page 158, line 19, delete "refers" and insert in its place - - refer - -.

At page 158, line 20, between "a" and "comprises" please delete "polypeptides" and insert in its place - - polypeptide - -.

At page 159, lines 27-28, directly following "cell function" please delete "(e.g., fibroblast function in wound healing)".

At page 160, delete lines 7-9.

At page 161, line 3, delete "telemerase" and insert in its place - - telomerase - -.

At page 161, line 18, please delete raccession number \_\_\_\_ and insert in its place --Accession No. AF015783--.

At page 163, line 5, please replace "using the \_\_\_\_\_" with --using the *Euplotes* and *Pombe* sequences, as described *supra*--.

At page 164, line 8, please delete "accession no. \_\_\_\_\_" and replace with --Accession No. AF015950--.

At page 164, line 1/5, please delete "(\*27)".

At page 164, line 16, please delete "(\*7)".

At page 168, line 9, directly following "5" please insert - - end - -.

At page 170, line 11, delete "anexpression" and insert in its place - - an expression - -.

At page 170, line 13, delete "forth" and insert in its place - - for the - -.

At page 170, line 19, delete "invetion" and insert in its place - - invention - -.

At page 171, line 13, please place in bold type "pGEX-2TK with hTRT Nucleotides 3272 to 4177 of pGRN121" and remove indent.

At page 172, line 27, directly following "[GSVTK])" please insert - - , - -.

At page 174, line 20, between "(italicized)" and "residues" please insert - - , - -.

At page 175, line 15, between "(italicized)" and "residues" please insert - - , - -.

At page 176, line 21, delete "enzymbe" and insert in its place - - enzyme - -.

At page 176, line 24, delete "Corp" and insert in its place - - Corp. - -.

At page 177, line 30, delete "\$\$\$".

At page 178, line 20, between "[NSAVD])" and "the" please insert - -, - -.

At page 179, line 19, delete "Spodoptera fungupeida" and insert in its place -- Spodoptera fungupeida --.

At page 181, line 9, between "High levels" and "full length" please insert - - of - -.

At page 182, line 29, delete "N-terminuse" and insert in its place - - N-terminus - -.

At page 183, line 30, delete "in Vitro" and insert in its place - - in vitro - -.

At page 186, line 17, delete "proteins" and insert in its place - - protein - -.

At page 186, line 20, delete "1 ug DNA" and insert in its place - - 1  $\mu$ g DNA - -.

At page 186, line 20, delete "1 ug digested" and insert in its place  $-1~\mu g$  DNA digested - -.

At page 186, line 24, delete "50 ul" and insert in its place - - 50  $\mu$ l - -.

At page 186, line 24, delete "2 ul" and insert in its place - - 2  $\mu$ l - -.

At page 186, line 24, delete "1 ul" and insert in its place - - 1  $\mu$ l - -.

At page 186, line 25, delete "1 ul" and insert in its place - - 1  $\mu$ l - -.

At page 186, line 25, delete "1 ug" and insert in its place - - 1  $\mu$ g - -.

At page 186, line 26, delete "25 ul" and insert in its place - - 25  $\mu$ l - -.

At page 186, line 27, change "30 oC" and insert in its place - - 30°C - -.

At page 186, line 29, delete "10 ul" and insert in its place - - 10  $\mu$ l - -.

At page 187, line 3, delete "The" and insert in its place - - the - -.

At page 187, line 11, between "also" and 'not" please insert - - did - -.

At page 188, line 5, delete "Using a" and insert in its place - - A - -.

At page 188, line 8, between "and" and "affinity" please insert - -, with - -.

At page 188, line 12, delete "double +" and insert in its place - - doublet - -.

At page 188, line 12, delete "post-translational" and insert in its place -- post-translational --.

At page 188, line 15, delete "Cysteine" and insert in its place - - cysteine - -.

At page 188, line 17, between "over" and "S-2-SulfoLink" please delete "a the".

At page 188, line 21, delete "E. coli" and insert in its place - - E. coli - -.

At page 189, line 9, delete "A HTRT" and insert in its place - - AN HTRT - -.

At page 189, line 29, delete "Testes" and insert in its place - - testes - -.

At page 189, line 30, delete "Therm (o-S)equenease" and insert in its place -- ThermoSequenase --.

At page 192, line 5, delete "in vitro" and insert in its place - - in vitro - -.

At page 192, line 10, delete "present" and insert in its place - - presence - -.

At page 192, line 13, delete "sequences" and insert in its place - - sequence - -.

At page 192, line 26, delete "in vitro" and insert in its place - - in vitro - -.

At page 192, line 28, delete "in vitro" and insert in its place - - in vitro - -.

At page 193, line 19, delete "OTHER REVERSE TRANSCRIPTASES" and insert in its place - OTHER REVERSE TRANSCRIPTASES - -.

At page 194, line 9, delete "oraccession" and insert in its place - - or accession - -.

At page 194, lines 23-24, please delete "Transfection of cultured human fibroblasts (BJ) with control plasmid and plasmid encoding hTRT" and insert in its place -- TRANSFECTION OF CULTURED HUMAN FIBROBLASTS (BJ) WITH CONTROL PLASMID AND PLASMID ENCODING hTRT --

At page 195, line 11, between "as described" and "patents" please insert - - in - -.

At page 195, line 13, delete "Kim et al" and Bodnar et al" and insert in their respective places - - Kim et al. - - and - - Bodnar et al. --

At page 195, line 22, delete PROMOTER REPORTER CONSTRUCT" and insert in its place - - PROMOTER REPORTER CONSTRUCT - -.

At page 196, line 10, please delete "[??]".

At page 196, line 14, between "will" and "the initiating" please insert - - be - -.

At page 196, line 14, directly following "SEAP ORF" please delete ")".

At page 196, line 16, after "with" please insert - - a - -.

At page 197, line 36, after "B." insert a space.

At page 198, line 4, between "cells" and "stably" please delete "are".

At page 198, line 5, delete "transciently" and insert/in its place - - transiently - -.